

### **REMARKS/ARGUMENTS**

This amendment is being filed in response to the Office action mailed March 10, 2005. As of the March 10<sup>th</sup> Office action claims 1-20 were pending with all claims standing rejected. Reexamination and reconsideration of the application as amended and in view of the remarks herein is respectfully requested.

#### **Amendments to the Specification**

The specification was objected to as including minor informalities. The specification has been amended on pages 2 and 7 as requested by the Examiner. No new matter is believed entered by these amendments. Withdrawal of the objections to the specification in view of these amendments is respectfully requested.

The brief description of the drawings has been amended to include a description of new FIGS. 22 and 23. The description of these figures corresponds to the description provided in U.S. Patent Application Publication No. 2005/0099175, the disclosure of which is incorporated by reference into the present application. Accordingly, no new matter is believed entered by this amendment.

A new paragraph has been added to the specification providing detailed description pertaining to new FIGS. 22 and 23. This paragraph corresponds to paragraph [0032] of U.S. Patent Application Publication No. 2005/0099175, the disclosure of which is incorporated by reference into the present application. As such, this amendment merely provides explicit recitation of matter previously incorporated by reference. Accordingly, no new matter is believed entered by this amendment.

### Amendments to the Drawings

New FIGS. 22 and 23 have been added. New FIGS. 22 and 23 correspond to FIGS. 22 and 23 of U.S. Patent Application Publication No. 2005/0099175, the disclosure of which was originally incorporated by reference into the present application. Accordingly, FIGS. 22 and 23 have been added to explicitly include subject matter which was previously incorporated by reference. No new matter is believed entered by this amendment.

### Objections to the Claims

Claim 10 was objected to because of a minor informality. Claim 10 has been cancelled without prejudice, rendering the rejection moot.

Claim 11 was objected to because the Examiner found it unclear what the terms “first” and “second” refer to with respect to the movable rail and the stationary rail. Applicants respectfully submit that the terms “a first of said movable rail and said stationary rail” and “said second of said movable rail and said stationary rail” recited in claim 11 are used to distinguish between the two rails, for the purpose of indicating that the sensor assembly is mounted to one of the two rails and that the other of the two rails does not extend between the magnet and the Hall device in either of the first or second positions. Applicants, therefore, respectfully submit that the usage of the term “first” is clear in the overall context of claim 11.

Claim 11 has been amended to replace “a first out put” with --a first output-- as requested by the Examiner. Claim 11 has also been amended to replace “and second position” with --and said second position-- as also requested by the Examiner. Furthermore, claim 11 has been amended to replace “rail a second output” on line 6 with --rail and a second output--, as requested by the Examiner.

Claim 18 was objected to because the phrase “said output” on line 18 lacks proper antecedent basis. Claim 18 has been amended to recite “said Hall device providing an output, said output being a first output when said sensor assembly is in a first position relative to a second seat rail and said output being a second output when said sensor assembly is in a second position relative to said second rail.” Accordingly, Applicants believe that adequate antecedent basis is now provided for the term “said output”.

In view of the foregoing amendments and comments, Applicants respectfully request that the objections to claims 10, 11, and 18 be withdrawn. No new matter is believed entered by any of these amendments.

#### Amendments to the Claims

Independent claims 1 and 11 have been amended herein to respectively recite “at least one magnet having a C-shaped cross-section” and “a sensor assembly comprising at least one C-shaped magnet”, as originally recited in claims 9 and 15. Claims 9 and 15 have, accordingly been cancelled without prejudice. Independent claims 18 and 20 have similarly been amended to recite “at least one C-shaped magnet.” No new matter is believed entered by this amendment.

Claims 10 and 16 have been cancelled without prejudice.

#### Rejections Under 35 U.S.C. §102

Claims 1, 2, 3, 5-8, 11, 13, 14, and 17-20 were rejected under 35 U.S.C. §102(b) as being anticipated by Becker et al. (6,095,555). This rejection is overcome for the following reasons.

Independent claims 1, 11, 18 and 20 have all been amended herein to recite “at least one magnet having a C-shaped cross-section” or “at least one C-shaped magnet.” Applicants

respectfully submit that this feature is not disclosed by Becker et al., and is not even asserted to be taught by Becker et al. Accordingly, it is respectfully submitted that, as amended, independent claims 1, 11, 18, and 20, as well as those claims 2, 3, 5-8, 13, 14, and 17, and 19 depending thereupon, are not anticipated by Becker et al.

#### Rejections Under 35 U.S.C. §103

Claims 4 and 12 were rejected under 35 U.S.C. § 103(a) as being obvious over Becker et al. in view of Tokunaga et al. (6,683,544). As discussed above, independent claims 1 and 12 have been amended to recite “at least one magnet having a C-shaped cross-section” and “at least on C-shaped magnet.” This feature is neither disclosed nor suggested by Becker et al. or Tokunaga et al. Accordingly, it is respectfully requested that this rejection be withdrawn upon consideration of the amendments herein.

Claims 9, 10, 15, and 16 were rejected under 35 U.S.C. §103(a) as being obvious over Becker et al. in view of Vig. et al. (5,781,005). Applicants respectfully submit that this rejection is overcome for the following reasons.

Claims 10 and 16 have been cancelled by this amendment, thereby rendering the rejection thereof moot.

The subject matter of dependent claims 9 and 15 has been incorporated into independent claims 1, 11, 18, and 20. As such, independent claims 1, 11, 18, and 20 now recite “at least one magnet having a C-shaped cross-section” or “at least one C-shaped magnet.” In combination with the other claimed features, this C-shaped magnet configuration may provide “an increase or exaggeration in the difference between the magnetic field in the presence of a proximate

activating rail and in the absence of a proximate activating rail” within certain separation ranges from the magnet. See, e.g., U.S. Patent Application Publication No. 2005/0099175, paragraph [0034], the disclosure of which is incorporated by reference into the present application, per the Cross-Reference to Related Applications.

In rejecting claims 9 and 15 the Examiner conceded that Becker et al. does not teach or suggest using a magnet having a C-shaped cross-section, or a C-shaped magnet. To satisfy this deficiency in the teachings of Becker the Examiner turned to Vig et al. as disclosing a C-shaped magnet. Applicants respectfully submit that there is no teaching, suggestion, or motivation to combine the disclosures of Becker et al. and Vig et al. to modify the seat position sensor disclosed by Becker et al. to include a magnet having a C-shaped cross-section, or a C-shaped magnet in order to achieve the claimed invention.

Becker et al. generally discloses a seat position sensor including a permanent magnet and a Hall effect device disposed in the magnetic field. The magnet creates a magnetic field of a first flux density that acts on the Hall effect device when a first member mounted to a vehicle seat is in a rearward position and a magnetic field of a second flux density that acts on the Hall effect device when the first member is in a forward position. See, e.g., Col. 1, l. 25-42. Vig et al. discloses a sensor arrangement “including a planar Hall element which is positioned in, parallel to, and defines a sensor plane having a front side and a back side ... and a magnet structure having an N pole and an S pole, the magnet structure being positioned behind the sensor plane and positioned so that an S pole and an N pole are adjacent each other and both are adjacent the element.” Col. 2, l. 61-67.

Applicants respectfully submit that there is no suggestion or teaching of any suitability or advantage within either of the cited references, or the combination thereof, which would

motivate one having skill in the art to make the asserted modification. In this regard, Applicants respectfully submit that neither an assertion that references can be combined or modified, nor an assertion that that the claimed invention is within the capabilities of one of ordinary skill in the art is sufficient to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a). MPEP 2143.01

Furthermore, Applicants respectfully submit that the magnet structure disclosed by Vig et al. is not a magnet having a C-shaped cross-section, or a C-shaped magnet, as claimed. In making this rejection the Examiner points to the magnet structure illustrated in the middle of the top row of Vig et al. FIG. 41. The magnet structure disclosed in the middle top row of FIG. 41 is illustrated including two separate bar magnets having a common pole piece extending between one end of each of the bar magnets. This arrangement is consistent with the magnet structure described by Vig et al. For example, in column 2, beginning on line 64, the magnet structure according to Vig et al. is disclosed as “having an N pole and an S pole, the magnet structure being position behind the sensor plane and position so that an S pole and an N pole are adjacent each other and both are adjacent the [Hall] element.” Such a structure is provided by two bar magnets having a pole piece extending between one end of each bar magnet.

By contrast to the structure disclosed by Vig et al. a C-shaped magnet as claimed is a single magnet including a single N-S axis therethrough. See, e.g., FIG. 22 of U.S. patent application Serial No. 10/675,199, the disclosure of which is incorporated by reference into the instant application per the Cross-Reference to Related Applications, and newly added FIG. 22 of the present application. It is this C-shaped structure having an N-S axis therethrough which, in combination with the other features of the claimed invention of claims 1, 11, 18, and 20 that

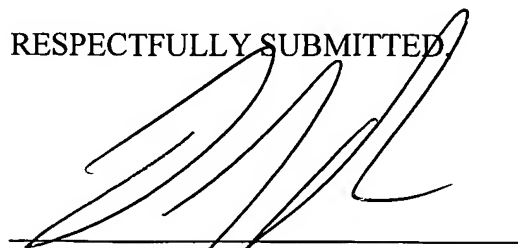
gives rise the previously discussed advantages. Accordingly, it is respectfully submitted that the structure disclosed by Vig et al. is not a C-shaped magnet as claimed.

In summary, Applicants respectfully submit that there is no teaching or suggestion to combine the teachings of Vig et al. with those of Becker et al. to achieve the claimed structure. Furthermore, Applicants respectfully submit that the magnet structure disclosed by Vig et al. is not a magnet having a C-shaped cross-section or a C-shaped magnet as claimed. Accordingly, it is respectfully submitted that independent claims 1, 11, 18, and 20, and claims 2-8, 12-14, 17, and 19 ultimately depending thereupon, are not obvious over Becker et al. in view of Vig et al. Withdrawal of these rejections in view of the amendments and comments herein is respectfully requested.

Having overcome all of the outstanding rejections, it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is respectfully solicited.

In the event that there are any fee deficiencies, or additional fees are payable, please charge, or credit any overpayment to, our Deposit Account No. 50-2121.

RESPECTFULLY SUBMITTED

A handwritten signature in black ink, appearing to read 'D. Perreault', is written over a horizontal line.

Donald J. Perreault, Reg. # 40,126  
Attorney for Applicants  
Grossman, Tucker, Perreault & Pflieger, PLLC  
55 South Commercial Street  
Manchester, NH 03101  
Phone: (603)668-6560; Fax: (603)668-2970

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Amdt. dated September 12, 2005  
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**AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes new FIGS. 22 and 23.

Attachment: Sheet of New Figures, including FIGS. 22 and 23